Health Canada Santé Canada

Evaluation Report for Category B, Subcategory 1.3 (Change in Specifications) Application

Application Number: 2006-3511
Application: Change in product specifications
Product: Diflubenzuron Technical Insecticide
Registration Number: 25451
Active ingredients (a.i.): Diflubenzuron
PMRA Document Number: 1484863

Background

Diflubenzuron is a acaricide/insecticide (insect growth regulator) used in Canada to control mosquitos, gypsy moth, fungus gnats, and shore flies.

Purpose of Application

The purpose of this application is to update the chemistry specifications, including a change in guarantee from 95% minimum to 98% nominal and to update the impurity profile.

Chemistry Assessment

Common Name: Diflubenzuron
Chemical Name: 1-(4-chlorophenyl)-3-(2,6-difluorobenzoyl)urea

Diflubenzuron Technical Insecticide has the following properties:

Property	Result
Colour and physical state	off-white to yellow crystal
Nominal concentration	98% by HPLC
Odour	N/A
Specific gravity	1.56
Vapour pressure @ 25ºC	1.2×10^{-4} mPa
pH	N/A (practically insoluble in water)
Solubility in water @ 25ºC	0.08 mg/L (pH 7)
n-Octanol/water partition coefficient (K_{ow})	log Kow = 3.89

The chemistry requirements for Diflubenzuron Technical Insecticide have been completed.

Canada

Health Assessments

The change in expression of the guarantee and the specifications update is not expected to impact the toxicological profile of the product Diflubenzuron Technical.

Environmental Assessment

An environmental assessment is not required since the update of the specifications for this technical active ingredient does not impact environmental risk.

Value Assessment

A value assessment is not required for technical grade active ingredient products.

Conclusion

The PMRA has concluded an evaluation of the application and has found the information sufficient to support the registration of Diflubenzuron Technical.

References

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